




Academic Qualifications

Year	Degree/Certificate	Institute	Performance
2021 - Present	B. Tech.	Indian Institute of Technology Kanpur	5.3/10
2019	Class XII (CBSE)	Jawahar Navodaya Vidhyalaya, Barsoor	71.4%
2017	Class X (CBSE)	Jawahar Navodaya Vidhyalaya, Barsoor	89%

Key Projects

Interactive AR/VR Solar System Project Course Project: DES643	(July'22)
<ul style="list-style-type: none">Developed an immersive and interactive AR/VR solar system simulation that allows users to explore detailed planetary features, including surface textures, atmospheric conditions, and orbital paths. The simulation also showcases celestial events as solar and lunar eclipses and the movement of asteroids and comets, providing an engaging and educational experience for users of all ages.Developed a simulation framework to visualize planetary trajectories and celestial phenomena, improving performance and accuracy.Achieved precise alignment and synchronization of solar and lunar eclipses, culminating in a project evaluation score of 90.	
Flappy Bird Game Development Course Project: DES643 	(Feb'22)
<ul style="list-style-type: none">Developed a Flappy Bird game using Unity and C#, featuring intuitive gameplay mechanics and responsive controls. Implemented physics-based obstacle generation and collision detection to create a challenging yet engaging user experience.Integrated score tracking and game state management, resulting in a polished and fully functional game demonstrating strong problem-solving skills and attention to detail in game design and development.	
PathFinder Visualizer Self project 	June'24
<ul style="list-style-type: none">Created a JavaScript application to determine the shortest path between two nodes in a grid with multiple obstructions.Integrated several graph algorithms, such as Breadth-First Search, Dijkstra, and Depth-First Search, to efficiently compute paths.Designed & developed a minimal interactive UI using React.js, featuring a grid for dynamic visualization of the algorithms in action.	
Realtime Facial Emotion Detection Deep Learning Project 	(July'22)
<ul style="list-style-type: none">Trained a Convolutional Neural Network (CNN) model with 28,709 images to recognize 5+ different real-time facial emotions correctlyUtilized OpenCV packages to automatically detect faces in images or live webcam feed and draw bounding boxes of 2 px around themTested the trained model on live feed through system's webcam with 7 different facial expressions and achieved an accuracy of 84%	

Technical Skills

Languages: C, C++, C#, Python, HTML, CSS, Java, SQL,	Utilities: Autocad, Git/Github, MySQL, Excel, PowerBI, Tableau
Libraries/Frameworks: Numpy, Pandas, Keras, Tensorflow, Scikit-Learn, Pytorch, Django, \LaTeX , BeautifulSoup	

Position Of Responsibility

Discipline Captain Jawahar Navodaya Vidhyalaya, Barsoor, Chhattishgarh	June'18-March'19
<ul style="list-style-type: none">Led a team of 500+ students to maintain discipline and ensure a positive learning environment.Implemented a new disciplinary action protocol by collaborating with 10+ educators and school administrators.Organized and supervised various school events, managing student behavior and ensuring adherence to schedules and guidelines.	

Relevant Courses

Python for everybody* Fundamentals of Computing Applied Probability and Statistics ^o Modern Instrumental Methods in Biological Sciences	Data Science, Codebasics* Linear Algebra and Differential Equations Bioinformatics and Computational Biology* Bioinformatics and Computational Biology	Data Structure and Algorithm ^o Computer Vision and Image Processing* Traditional Machine Learning(ML)* Structural Biology
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Extra-Curricular Activities

Cultural	<ul style="list-style-type: none">Participated in IIT Kanpur's Freshers Dance Showcase 2022, which received 9.5 million views on YouTube.Secured First place in the Debate competition.Secures Second place in Patriotic Song Singing Competition.Secured Second place in Dialogue Writing Competition.
Sports	<ul style="list-style-type: none">Secured Gold Medals in Volleyball at Inter IIT Sports Meet '23, Udhgosh '23, Women's Inferno '23, Institute Volleyball League '23, and JNV cluster-level meets 2015 and 2017.Secured Silver Medals at Udhgosh '22 and Inter JNV Regional Meet '16.Recognized as the Man of the Match at Udhgosh '22 and awarded the Best Emerging Player in Institute Volleyball League.Participated in the Inter JNV Regional Sports Meet'15.Participated in the Inter JNV National Sports Meet'16, showcasing long-term commitment and active engagement in volleyball.Secured Gold Medal in Inter House Kabaddi Match.